DRAFT APPENDIX 12 - Stormwater Management for Existing Development Program Instructions for Appendix 12 Reporting

Each year, Phase I City and County Permittees must submit an updated list of structural stormwater control (SMED) projects to Ecology with their Annual Reports. Table 1 provides the format for this reporting. The submittal shall be in .xlsx (Excel) file). This section provides additional information and instructions for completing Table 1, as required, per Permit section S5.C.7.c. Table 1 is linked to a reporting template.

Even though the defined level of effort is due to be tallied at the end of 2027, annual reporting of SMED Program projects provides the opportunity to track and report progress. Fill in all values as completely as possible each year. In subsequent years, Permittees should update the values for each project and add projects to new rows, as needed. You may remove projects that are cancelled or otherwise will not be used toward achieving the defined level of effort (as expressed in SMED Program Points). Projects that were completed prior December 31, 2022 may not be included.

Enter Project Types 1, 2, 3, 4, or 5 (see page 8) on design or complete section of Table 1, as appropriate. Only add to the Design section until the project design is completed. Then add to the Construction/Completed/Maintenance section once completed.

Below is the reporting template, with examples in italics and formulas to calculate subtotals and totals. Below the table is a description of content for each column in the table.

Table 1: SMED Project List Reporting Template 1

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 $^{^1} https://fortress.wa.gov/ecy/ezshare/wq/permits/MS4_2024_Appendix_12_PHI_Report.xlsx$

Reporting Year

List the reporting year that project work was in. For example, if completing reporting in 2025, the reporting year would be 2024.

Project Name

Permittees shall assign each SMED project its own row. Project names may change over time. If a project name changes, include a note or parenthetical that ties the new name to the old name. Maintenance actions with a recurring event frequency over multiple years must be named uniquely for each year (e.g., Sweeping for WQ 2025).

Project Type

Ecology assigned each project type a number as described below in this document. The project type numbers reflect the order in which they are listed in S5.C.7.a. For projects involving watershed collaboration, permittees should enter a project type number from 1-12, plus 13 for watershed collaboration.

Separate the design stage and complete/maintenance stage of each project by the appropriate rows indicated in the template spreadsheet. If project is a watershed collaboration that has reached a milestone, place points in the applicable column –signed agreement or received funding.

Status

The defined level of effort can be reflected in SMED Program Points calculated for either of two project stages: Design and Completion/Maintenance. Projects at or beyond the 60% design stage by December 31, 2027, shall be counted toward the defined level of effort allowed for design-stage projects. The Complete/Maintenance stage is for completed and operational construction projects, fully executed property purchases, implemented maintenance actions (that are associated with Project Types #5, #11, and #12), and completed restoration projects. A restoration project is not considered completed until any maintenance warranty times established with the construction contract have been completed, or vegetation establishment can be verified. For tracking purposes, update the status of projects for each yearly submittal. Watershed collaboration projects' status would depend on that particular project's status (could be many different project types).

Cost Estimate

Estimate total costs during the Design stage and provide actual costs for the Complete/Maintenance stage. Update costs over the course of the project where known.

Where known, include local/state/federal funding sources by percentage in the 'Comments' field. Once a project is complete, the comments should reflect the accurate funding source distribution. For projects still underway, you may want to include an explanatory note to distinguish between funding sources that are secured and funding sources that you estimate.

Latitude/Longitude

If your project has multiple locations, include a Lat/Long for each location and describe the reason why in an explanatory note. Report Lat/Long in decimal degrees to six decimal places, and include the Geographic Coordinate System (e.g., WGS84). Maintenance actions that cover a geographic area shall provide zip codes for the area(s) addressed and attach a map at the time the SMED Program Points are calculated.

Receiving Waterbody Name

List the waterbody to which the stormwater from the project discharges. If a receiving water body is unnamed, include the name of the water body that the unnamed creek/lake is a tributary of. State if the stormwater from the project is wholly or partially infiltrated; this could be explained further in the 'Comments'.

Basin Area

Enter the total area served by SMED project(e.g., the full basin area). For stormwater facilities, this is the catchment area contributing runoff to the facility, including upstream facilities working as a system.

Use the appropriate area or length unit (acres, curb miles, linear feet) for Project types 5 through 11. Clearly specify units for area or length in basin area reporting.

For these project types, enter the area for the relevant project type:

- The area purchased or otherwise conserved or restored.
- For line cleaning projects, this is the linear feet cleaned.
- For sweeping projects, enter the amount for curb miles or acres swept.

For street sweeping, one curb mile using an 8.25 wide sweeper width from the curb would cover an area equal to one acre. If you use curb miles as the unit, but your sweeper width is different than this, specify the sweeper width.

There are specific instructions for identifying project area for sweeping and line cleaning below in the "Project Type" section. If the project serves an area under one acre, refer to "How to Calculate Area and SMED Points for Small Projects Under One Acre". If the project involves a watershed collaboration that is being implemented and this project type is being reported, each participating Permittee shall enter the basin area served by the project in their jurisdiction OR a different way to allocate project costs and benefits as agreed to by the collaborative agreement. There are more detailed instructions in the "How to Calculate Area and SMED Points for Watershed Collaboration.

LID Equivalent Area and SMED LID Point Factor

For each SMED project that you expect to result in a hydrologic benefit for small storms, use the LID Performance Standard Equivalent Area process described in the section titled 'How to Calculate Equivalent Area'. Enter the calculated LID Equivalent Area in the relevant column, then use Table 2 to identify the appropriate LID SMED Point Factor.

SMED Runoff Treatment (RT) Equivalent Area and Runoff Treatment Point Factor

For each SMED project that you expect to result in a runoff treatment benefit (e.g., TSS, dissolved Copper, dissolved Zinc, or Total Phosphorus), calculate Runoff Treatment Equivalent Area as described in the section titled, "How to Calculate Equivalent Area." Enter the calculated RT Equivalent Area in the relevant column then use Table 2 to identify the appropriate RT SMED Point Factors: Runoff Treatment, Runoff Treatment in a known water quality problem area, Achieves Enhanced or Phosphorus Treatment, or Meets New/Redevelopment Standards for Target Pollutant.

Runoff in a known water quality problem area point factor is designed to let the Permittees identify areas that they know need stormwater management and that are not yet part of an approved plan. This area can be defined by the Permittee. Possible areas to consider are: areas with > 50% commercial/industrial or high density land use, areas with active or previous toxic clean-ups, or areas that drain to a Superfund designated receiving water.

Only one runoff treatment point factor can be chosen for each project.

SMED Flow Control (FC) Equivalent Area and SMED Program Points

For each SMED project that you expect to result in a hydrologic benefit for larger storms, use the Flow Control Equivalent Area process described in the section titled 'How to Calculate Equivalent Area'. Enter the calculated FC Equivalent Area then use Table 2 to identify the appropriate FC SMED Point Factors.

As with runoff treatment, the Flow Control in a known flow control problem area is defined by the Permittee. It could include areas with low B-IBI scores or ongoing erosion issues.

Maintenance Activity Point Factor

Enter the maintenance with capital construction costs ≥ \$25,000 point factor for projects that have the acres served entered in the Basin Area.

Sweeping Point Factor

Enter the sweeping Point Factor for sweeping projects that have an acreage or curb mile area entered in Basin Area.

Line Cleaning Factor

Enter the line cleaning Point Factor for line cleaning projects that have a linear feet measure entered in Basin Area.

Watershed Collaboration Milestone Points

Projects will get points in two different ways, depending on the status of the project – points for reaching a milestone of collaboration development and a Point Factor for a project that is in design or complete/maintenance stage.

For projects under development, specific points can be added for milestones in developing a watershed collaboration: completed agreement or funding. All participating permittees can add these points toward their total Project Point Subtotal. See Table 2 and "How to Calculate Area and Points for Watershed Collaboration."

Project Point Subtotal

Refer to Table 2 and associated project details to determine the SMED Point Factors for each SMED project. Calculate the Project Point Subtotal based on area of project and project type.

Multiply the project equivalent area times the individual Point Factors that apply to each item (LID, runoff treatment, flow control, maintenance activity, sweeping, line cleaning). Add watershed collaboration points for a collaboration that is under development. The sum of these equivalent area benefits and any watershed collaboration points will be the Project Point Subtotal. The subtotal column will perform these functions, once the areas and Point Factors are filled in.

If the project provides benefits for standard flow control and/or runoff treatment, and/or LID, calculate equivalent areas and SMED Point Factors for each benefit. There can be different SMED Point Factors for each of the three (potentially different) equivalent areas. The point totals for LID, runoff treatment, and flow control benefits can be totaled. For example, a bioretention facility without a liner would get SMED points for LID, based on the LID performance standard, Runoff Treatment points for the amount that infiltrates through the bioretention soil media, and Flow Control points based on flow control (MR#7 benefit ratio) and equivalent area process.

Implements Existing Watershed Plan Point Factor

If your project implements (1) an Ecology-approved basin plan (refer to Appendix 1, Section 7), (2) Watershed-Scale Stormwater Plan from the 2013 *Phase I Municipal Stormwater Permit cycles*, Special Condition S5.C.5.c, (3) Stormwater Management Action Plan from the 2019 *Phase I Municipal Stormwater Permit*, or (4) a TMDL (refer to Appendix 2), enter the Point Factor listed in Table 2. Cite the specific project in the 'Comments' field of the reporting template (Table 1).

Benefits Overburdened Community(ies) Point Factor

This reporting section should also be used to identify if a project benefits an overburdened community(ies). Enter the Point Factor listed in Table 2. Note the expected benefits in 'Comments.'

High Pollution Generating Transportation Areas (HPGTA) Point Factor

These are projects that address road/transportation runoff that may be carrying tire wear or other roadway pollutants to the stormwater system. These would include projects that manage roads owned or maintained by Permittee that are defined as arterials or have AADT>15,000 vehicles, high use sites that have high traffic turnover, or parking areas with over 300 total trip ends; i.e. commercial buildings with frequent turnover of visitors. Enter the Point Factor in Table 2.

Watershed Collaboration Point Factor

When watershed collaboration projects are implemented, each participant can apply an additional Point Factor. Implementation is after funds are allocated and when project activity has begun; i.e., staff time is spent, acquisitions are being negotiated, or design has begun. The area used to calculate points is either the area managed in the Permittees jurisdiction, or a specific percentage of the project managed as identified in the collaborative agreement. See more detail in "How to Calculate Area and SMED Points for Watershed Collaboration."

Total SMED Project Points

Multiply Project Point Subtotals by any of the other applicable Project-Wide Point Factorsimplements approved plan, benefiting overburdened communities or managing stormwater from a High Pollutant Generating Transportation Area, or watershed collaboration.

If more than one Project-Wide Point Factor applies, add the Point Factors together and multiply by the project area, from Basin Area column. As in, the Project Subtotal, the Total SMED Project Points column in Table 1 will perform these functions.

The template spread sheet will automatically total all the design stage and completed/maintenance stage projects.

Total Points for Project Types #1-5

Enter the total points for these SMED projects to keep track of reaching 300 total points for these types. The template spreadsheet will automatically sum the overall total for these project types.

SMED Comments

Use this section to document the funding source distribution for SMED projects. If the project fully or partially infiltrates, this could be explained in this section.

If your project implements an Ecology-approved basin plan (refer to Appendix 1, Section 7) or Watershed-Scale Stormwater Plan from the previous *Phase I Municipal Stormwater Permit* cycles, Special Condition S5.C.5.c, Stormwater Management Action Plan, or a TMDL (refer to Appendix 2), note the specific plan in this field. Use this field also to identify participants of a watershed collaboration.

If your project is in or will benefit an overburdened community, note the expected benefits here.

This section can also be used to note any other information you feel is relevant, that is not addressed in other columns; i.e. how you designated a HPGTA.

Project Types

Below is a listing followed by a description of the project types that can receive SMED points. Permittees can have more than one project type per project, if applicable.

List of Qualifying Project Types

- 1. New flow control facility
- 2. New runoff treatment facility (or treatment and flow control facility)
- 3. New LID BMPs
- 4. Retrofit of existing treatment and/or flow control facility
- 5. Maintenance with capital construction costs ≥ \$25,000
- 6. Property acquisition
- 7. Restoration of riparian buffer
- 8. Restoration of forest cover
- 9. Floodplain reconnection projects
- 10. Removal of impervious surfaces
- 11. Street Sweeping
- 12. Line cleaning
- 13. Watershed collaboration

(1) New Flow Control Facilities

(S5.C.7.a.i.(a))—Flow control facilities need not be regional. These facilities do not have to meet the "standard flow control requirement" (refer to Appendix 1, Section 4.7) but they shall be new facilities designed to control stormwater flow from existing development. Project proponents that don't follow design criteria from the SWMMWW, or equivalent manual, should be prepared to provide additional project details at Ecology's request to support calculations for equivalent area, water quality benefits, and SMED Program Points. Qualifying projects in this category will be compared against the Flow Control Standard (Minimum Requirement #7) for SMED Program Point calculations.

(2) New Runoff Treatment Facilities

(S5.C.7.a.i.(b))—Runoff treatment facilities include facilities that provide oil control, phosphorus treatment, metals treatment, and basic treatment. Facilities in this category do not have to meet runoff treatment requirements (e.g., treat 91% of the average annual runoff) but they shall be new facilities that provide a treatment benefit for existing development. Project proponents that don't follow design criteria from the SWMMWW, or equivalent manual, should be prepared to provide additional project details at Ecology's request to support calculations for equivalent area, water quality benefits, and SMED Program Points. Maintenance activities are not classified under this project type. Qualifying projects in this category will be compared against the Runoff Treatment Standard (Minimum Requirement #6) for SMED Program Point calculations.

(3) New LID BMPs

(S5.C.7.a.i.(c))—These facilities are consistent with the lists of On-Site Stormwater Management BMPs of Minimum Requirement 5 and reduce the volume of runoff by infiltrating runoff from the small, more frequent storms. Qualifying new LID BMP projects result in the reduction or prevention of hydrologic changes through use of on-site (e.g., infiltration, dispersion, evapotranspiration, rainwater harvesting) stormwater management BMPs. LID principles reflected in site design techniques do not qualify because projects that apply LID principles in a retrofit setting should be accommodated in other qualifying project types (such as property acquisition and restoration of forest cover). Qualifying projects in this category will be compared against the LID Performance Standard (Minimum Requirement #5) for SMED Program Point calculations.

(4) Retrofitting of Existing Treatment and/or Flow Control Facilities

(S5.C.7.a.i.(d))—Retrofitting is expected to occur on previously constructed stormwater facilities that, if modified, would provide additional hydrologic or runoff treatment benefits. For example, Ecology considers the retrofit of a stormwater pond to provide a settling area and more storage, a retrofit to a stormwater facility. Maintenance activities such as removing sediment to re-establish wet pool volume but not increasing volume beyond the initial design are not classified under this project type.

(5) Maintenance with Capital Construction Costs ≥ \$25,000

(S5.C.7.a.i.(e)) — This project type applies to maintenance or repair projects that improve the hydrologic or treatment performance of stormwater facilities. This project type is directly related to Operations and Maintenance Program requirements at S5.C.10.a.ii.(c) which reflects that maintenance projects, including repairs, which require capital construction ≥ \$25,000 are not subject to the required 2-year window for completing the maintenance. These projects typically compete with retrofit projects for limited capital construction funding. Ecology intends that these projects be reflected in the SMED program to provide a comprehensive view of MS4 maintenance activities and requirements. Permittees may develop criteria for identifying maintenance projects that reach the capital construction cost threshold on an area-wide or system-wide basis per the requirement in S5.C.7.b.ii.(g). A maintenance project that removes sediment from an existing pond to re-establish the original design volume would qualify under this project type.

(6) Property Acquisition for Water Quality and/or Flow Control Benefits

(S5.C.7.a.i.(f)) — This category excludes the purchase of property for the siting of a stormwater facility. Instead, purchase of a likely development site to permanently prevent it from being developed would qualify under this category. This category includes forest protection and conservation easements. Riparian habitat acquisition qualifies under this project type. Property used for dispersion does not qualify under this project type; it is considered a new LID BMP (Project Type 3).

(7) Restoration of Riparian Buffers

(S5.C.7.a.ii.(a)) — This project type describes planting and restoring of riparian buffers above the ordinary high watermark that can reduce the discharge of pollutants and reduce impacts to waters of the state by protecting or restoring hydrologic capacity.

(8) Restoration of Forest Cover

(S5.C.7.a.ii.(b)) — This project type describes planting and restoring of forest cover that can reduce the discharge of pollutants and reduce impacts to waters of the state by protecting or restoring hydrologic capacity.

(9) Floodplain Reconnection Projects on Water Bodies That Are Not Flow Control Exempt Per Appendix 1

(S5.C.7.a.ii.(c)) – Qualifying floodplain reconnection projects will provide flow reduction and runoff treatment benefits.

(10) Permanent Removal of Impervious Surfaces

(S5.C.7.a.ii.(d)) – This project type describes permanent removal of impervious surfaces and replacement with pervious vegetated surfaces meeting BMP T5.13 or trees that promote infiltration, dispersion, and uptake by plants or reduce the amount of pollution generating impervious surfaces.

(11) Street Sweeping Programs (previously part of "Other actions to address stormwater runoff into or from the MS4 not otherwise required in S5C)

(S5.C.7.a.ii.(e)) – Ecology intends street sweeping projects to qualify under the SMED program and be counted toward the SMED minimum level of effort, only if they are above and beyond the minimum requirements in S5.C.10 *Operations and Maintenance Program*. Limitations and details of specific applications of this project type are provided below.

Projects must be designed, executed, and documented to have the following characteristics:

- Only using a high efficiency sweeper.
- Only street sweeping routes from applicable MS4 service areas can be used to support runoff treatment benefit calculations.
- The SMED Program Points for a qualifying street sweeping program is based on curb miles or acres swept (as documented through broom use and tracking of parked cars, vegetation, and other conditions that prevent the sweeper from reaching the edge of the roadway) and frequency of sweeping that is in addition to the street sweeping requirements in S5.C.10 Operations and Maintenance Program.

(12) Stormwater Line Cleaning Programs (previously part of "Other actions to address stormwater runoff into or from the MS4 not otherwise required in S5.C)"

(S5.C.7.a.ii.(f)) – SMED Program Points are based solely on linear feet cleaned during the specified time. Line cleaning of the same section of stormwater conveyance pipe within a 5-year permit cycle does not qualify under the SMED Program. Portions of lines that were inaccessible during line cleaning cannot be included in the calculation. If line cleaning is used to comply with S5.C.10.d.i Catch Basin Inspection Alternative (c), or in implementing Appendix 13, it cannot be counted toward the SMED program.

(13) Watershed Collaboration

(S5.C.7.a.ii.(g)) – This new project type describes interjurisdictional SMED projects of any type (#1-12) that are implemented by more than one Permittee, or between a Permittee and non-Permittee. These are projects where either the project area and/or drainage basin, is shared. Permittees can gain SMED Project Points for planning and funding an eligible project type within a watershed in which they own or operate an MS4 or to which their MS4 discharges. Specific stages of project implementation must be completed: signed collaborative agreement and securing of funding. Once implementing a funded plan, Permittees can apply a point factor to the project. See "How to Calculate Area and SMED Points for Watershed Collaboration" for detailed steps.

Non-Qualifying Projects

The following projects and project characteristics DO NOT qualify:

- Projects that do not have a nexus with the current MS4 or do not prevent future MS4 impacts.
- Projects that occur within the receiving water do not qualify, such as:
 - In-channel habitat and stream restoration
 - Fish barrier removal
 - Stabilization of down cutting
 - o In-stream culvert replacement
 - Mitigation projects otherwise required to compensate for problems caused by excessive stormwater runoff peak flows and geomorphologically significant flows.

Wetland restoration projects may qualify if existing degraded wetlands are designed to become treatment wetlands in accordance with the SMMWW. Such a project would be a "New Treatment Facility" Project Type (Project type 2).

SMED Point Factors

SMED Point Factors are described below in Table 2.

These are the Point Factors that are used as multipliers for the area of the project to calculate the Total SMED Points for each project. Follow the instructions in Table 1 Project List Reporting Template to calculate the Project Point Subtotal and SMED Project Point total after considering any Project-Wide Point Factors.

Permittees can apply more than one Point Factor, if applicable. Most of these factors are tied to specific project types, which are explained above in "Project Types".

Table 2: SMED Program Point Factors

Relevant Project Type #s	Project Achievement Description	SMED Program Point Factors
#1 & #4	Flow Control	2 times Flow Control Equivalent area
#1 & #4	Flow Control in a known flow control problem area.	3 times Flow Control Equivalent area
#2 & #4	Runoff Treatment	2 times Runoff Treatment Equivalent area
#2 & #4	Runoff Treatment in a known water quality problem area	3 times Runoff Treatment Equivalent area
#2 & #4	Achieves Enhanced or Phosphorus Treatment	3 times Runoff Treatment Equivalent area
#2 & #4	Meets New and Redevelopment Standards	5 times Runoff Treatment Equivalent area
#3	Provides LID Performance (i.e., On-site infiltration to manage low flows)	3 times LID Equivalent area
#5	Maintenance with capital construction costs ≥ \$25,000	0.50 times the acres served by the maintenance activity*, or
#6	Property Acquisition	0.50 times acres acquired
#7	Restoration of Riparian Buffer	0.35 times acres restored
#8	Restoration of Forest Cover	0.25 times acres restored
#9	Floodplain Reconnection	0.10 times acres reconnected, with a maximum of 200 points
#10	Permanent removal of impervious surfaces	1.0 times the sq. ft. of impervious surface removed
#11	Sweeping	0.1 times curb miles/acres swept
#12	Line Cleaning	0.01 times the linear feet of lines cleaned
Any project type	Implements Approved Plan	1.5 times subtotal SMED points
Any project type	Benefits Overburdened Community(ies)	1.5 times subtotal SMED points
Any project type	High Pollutant Generating Transportation Areas (HPGTA)	1.7 times subtotal SMED points
Any project type	Watershed Collaboration	1.5 times subtotal SMED points

How to Calculate Equivalent Area

LID Performance Standard (MR#5) Benefit Ratio and Equivalent Area Process

- 1. Determine the total area (in acres) draining to the project. This is called the "full basin" in these steps.
- 2. Run the Western Washington Hydrology Model (WWHM), or other approved continuous simulation model, to determine if the BMP meets the LID Performance Standard for the full basin area.
 - If the project meets the LID Performance Standard, the Equivalent Area equals the area draining to the BMP.
 - If the project uses Full Dispersion functionally equivalent to BMP T 5.30 in Chapter 5 of Volume V of the *Stormwater Management Manual for Western Washington*, the Equivalent Area equals the area draining to the BMP.
- 3. If the project does not meet the LID Performance Standard for the full basin use the Western Washington Hydrology Model (WWHM 2012), or other approved continuous simulation model to calculate the infiltration area of the BMP required to meet the LID Performance Standard Requirement (refer to Permit Appendix 1, Section 4.5) (e.g., match developed discharge durations to applicable pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year peak flow up to 50% of the 2-year peak flow). Identify the area available for infiltration in the new facility. This is the "required" New/Redevelopment infiltration area for a new BMP project, or the "required" area added through a project that retrofits an existing BMP.
- 4. Determine the infiltration area provided by the project under consideration. This is the "actual" infiltration area.
- 5. Divide the actual infiltration area (4) by required New/Redevelopment infiltration area (3) to get the LID Benefit ratio.
- 6. Multiply the LID Benefit ratio (5) by the full basin area (1) to get LID Equivalent area. The equivalent area cannot be greater than the full basin area.
- 7. Multiply the LID Equivalent area (6) by the appropriate SMED Point Factors to calculate the Flow Control SMED Project Point Subtotal for the project.

Runoff Treatment (MR#6) Benefit Ratio and Equivalent Area Process

- 1. Determine the total area (in acres) draining to the project. This is called the "full basin" in these steps.
- 2. Use an approved continuous simulation model to determine the required New/Redevelopment Runoff Treatment flow (cfs) or Volume (ac-ft) for the full basin using WWHM 2012.
- 3. Determine the flow rate or volume provided by the project. This is the "actual" runoff treatment flow rate or volume of a new BMP project, or the "actual" flow rate or volume added through a project that retrofits an existing BMP.

- 4. Divide the actual flow rate or volume (3) by the full basin required flow rate or volume (2) to get the Runoff Treatment Benefit ratio.
- 5. Multiply the Runoff Treatment Benefit ratio (4) by the full basin area (1) to get the MR #6 Runoff Treatment Equivalent area. The equivalent area cannot be greater than the full basin area.
- 6. Identify the appropriate SMED Point Factor(s) from Table 2.
- 7. Multiply the Runoff Treatment Equivalent area (5) by the appropriate SMED Project Point Factor (6) to calculate the Runoff Treatment SMED Project Point Subtotal for the project.

Flow Control (MR#7) Benefit Ratio and Equivalent Area Process

- Determine the total area (in acres) draining to the project. This is called the "full basin" in these steps. This area can include basins upstream of the new pond that are upstream of other retention/detention facilities is there is a series of facilities that work together to control stormwater flows.
- 2. Use an approved continuous simulation model, to calculate the amount of retention/detention storage required to meet the Standard Flow Control Requirement (refer to Permit Appendix 1, Section 4.7) (e.g., match developed discharge durations to applicable pre-developed durations for the range of pre-developed discharge rates from 50% of the 2-year peak flow up to the full 50-year peak flow) for the full basin.
- 3. Identify the volume of retention/detention at the overflow installed for the project (acft). This is the "actual" retention/detention volume of a new BMP project, or the "actual" volume added through a project that retrofits an existing BMP.
- 4. Divide the actual retention/detention volume (3) by the full basin required New/Redevelopment retention/detention volume (2) to get the Flow Control Benefit ratio. If the ratio is greater than 1.0, use 1.0 as your Flow Control Benefit ratio.
- 5. Multiply the Flow Control Benefit ratio (4) by the full basin area (1) to get the Flow Control Equivalent area. The equivalent area cannot be greater than the full basin area.
- 6. Identify the appropriate SMED Point Factor(s) from Table 2.
- 7. Multiply the Flow Control Equivalent area (5) by the appropriate SMED Point Factor(s) (6) to calculate the Flow Control SMED Project Point Subtotal for the project.

How to Calculate Area and SMED Points for Small Projects under 1 Acre

This procedure only applies to projects whose total basin area is less than 1.0 acre. Projects with basin areas larger than 1 acre must follow the Equivalent Area Calculation process.

The allowance of a program designed to implement small-scale projects that are not planned in advance (S5.C.7.a.iv) is not considered a project type in itself. Instead, those projects are expected to be reflected in the other project type categories as applicable. A single project may be eligible to earn SMED points for LID, Runoff Treatment, and Flow Control, based on the benefits provided by the project.

Use the same procedure for each of the applicable LID Performance Standard (MR#5), Runoff Treatment (MR#6), or Flow Control (MR#7)

- 1. Determine the total area (in acres) draining to the project. This is called the "full basin". You do not need to calculate the equivalent area.
- 2. Multiply the full basin area by the appropriate SMED Program Point Factor to calculate the SMED Program Points for the project.

How to Calculate Area and SMED Points for Watershed Collaboration

- 1. Projects will get points in one of two ways, either by reaching a milestone of development (see 2. below) OR by getting a point factor for a project that is in design or complete/maintenance stage (see 3. below).
- 2. Watershed collaboration projects can be any project type. While a collaboration is being developed, each Permittee that participates in a watershed collaboration will receive points for these two milestones:
 - a. 25 points for signed collaborative agreement to carry out SMED project.
 - b. 50 points for a funding commitment to implement the project.

This funding milestone is not tied to specific funding or resources from each participant. It is reached when the project is funded. Resources, whether funding, staff time, or other, can be stipulated in the collaborative agreement.

- 3. When watershed collaboration projects are implemented, each participant can apply an additional point factor of 1.5. The area used to calculate points is either:
 - a. the area managed in Permittee jurisdiction or
 - b. a specific percentage of area managed as identified in collaborative agreement.

Add Project Type #12 to the Project Type column in the Reporting Template for projects that are being implemented. The additional watershed plan point factor can apply to the appropriate area for each Permittee. The appropriate area is either 3a. or 3b. above. This area will be listed in the Basin Area of the template.